

# National Functional Guidelines Report #03

Lab SENTIN(SENTINEL) SDG MF3PH3 Case 40821 Contract EPW09040 Region 6 DDTID 110352 Sow ISM01.2

## Data Review Reports

Blanks

Blanks	ICP_MS
NE05	<p>The following samples have analyte results greater than CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.</p> <p>MF3PN0L, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PR5, LCS, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9, MF3PN0S, MF3PN0A</p> <p>Sodium MF3PN0L, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PR5, LCS, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9</p> <p>Aluminum MF3PN0, MF3PN0D, MF3PP3, MF3PR2, LCS, MF3PN0L</p> <p>Nickel MF3PN0S, MF3PN0A, MF3PQ0, MF3PR5, LCS</p> <p>Beryllium MF3PN0S, LCS</p> <p>Zinc MF3PN0L, MF3PN0S, MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PR5, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9, LCS</p> <p>Antimony MF3PN0S, LCS</p> <p>Potassium MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PR5, LCS, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9</p> <p>Thallium MF3PN0S, LCS</p> <p>Magnesium MF3PN0L, MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PR5, LCS, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9</p> <p>Lead MF3PN0S, MF3PP3, MF3PP4, MF3PQ0, MF3PQ1, MF3PQ3, LCS</p>
Blanks	ICP_MS
NE04	<p>The following samples have analyte results greater than or equal to MDLs but less than or equal to CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.</p> <p>MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9, MF3PN0A, MF3PQ0, MF3PR5</p> <p>Nickel MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9</p> <p>Beryllium MF3PN0A, MF3PP3</p> <p>Aluminum MF3PN0A, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR3, MF3PR5, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9</p> <p>Antimony MF3PN0A, MF3PP3, MF3PP4</p> <p>Thallium MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9</p> <p>Lead MF3PN0A, MF3PN0, MF3PN0D, MF3PQ2, MF3PQ4, MF3PR1, MF3PR3, MF3PH4, MF3PL5, MF3PL6</p>
Blanks	ICP_MS
ND03	<p>The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.</p>

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Blanks

Blanks	ICP_MS
	PBW, MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ4, MF3PR1, MF3PR3, MF3PH4
	Aluminum PBW, MF3PN0A
	Thallium PBW, MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9
	Lead PBW, MF3PN0A, MF3PN0D, MF3PQ4, MF3PR1, MF3PR3, MF3PH4
Blanks	ICP_MS
ND04	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated at CRQLs.
	MF3PN0A, MF3PN0, MF3PN0D, MF3PH3, MF3PL5, MF3PL6, MF3PM9, MF3PN0L, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PR2, MF3PR3, MF3PQ4, MF3PR1, MF3PH4
	Cobalt MF3PN0A, MF3PN0, MF3PN0D, MF3PH3, MF3PL5, MF3PL6, MF3PM9, MF3PN0L
	Beryllium MF3PN0A, MF3PP3
	Aluminum MF3PN0A
	Antimony MF3PN0A
	Thallium MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9
	Manganese MF3PN0, MF3PQ0, MF3PQ1
	Iron MF3PN0A, MF3PN0, MF3PQ1, MF3PQ2, MF3PR2, MF3PR3, MF3PM9
	Silver MF3PN0A, MF3PP3
	Lead MF3PN0A, MF3PN0D, MF3PQ4, MF3PR1, MF3PR3, MF3PH4
Blanks	ICP_MS
ND05	The following samples have analyte results greater than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PR5, LCS, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9, MF3PN0L, MF3PN0S
	Aluminum MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PR5, LCS, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9, MF3PN0L
	Thallium MF3PN0S, LCS, MF3PN0L
	Lead MF3PN0S, MF3PN0, MF3PP3, MF3PP4, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, LCS, MF3PL5, MF3PL6, MF3PN0L
Blanks	ICP_MS
ND06	The following samples have analyte results greater than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	MF3PN0S, LCS, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PR5, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9, MF3PN0L, MF3PN0A

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Blanks

Blanks	ICP_MS
	Cobalt MF3PN0S , LCS
	Aluminum MF3PN0 , MF3PN0D , MF3PP3 , MF3PP4 , MF3PP9 , MF3PQ0 , MF3PQ1 , MF3PQ2 , MF3PQ3 , MF3PQ4 , MF3PR1 , MF3PR2 , MF3PR3 , MF3PR5 , LCS , MF3PH3 , MF3PH4 , MF3PL5 , MF3PL6 , MF3PM9 , MF3PN0L
	Beryllium MF3PN0S , LCS
	Antimony MF3PN0S , LCS
	Thallium MF3PN0S , LCS , MF3PN0L
	Cadmium MF3PN0S , LCS
	Magnesium MF3PN0A , MF3PN0 , MF3PN0D , LCS , MF3PH3 , MF3PH4 , MF3PL5 , MF3PL6 , MF3PM9 , MF3PN0L
	Iron LCS , MF3PN0L
	Manganese MF3PN0S , LCS , MF3PM9 , MF3PN0L
	Silver MF3PN0S , LCS
	Lead MF3PN0S , MF3PN0 , MF3PP3 , MF3PP4 , MF3PQ0 , MF3PQ1 , MF3PQ2 , MF3PQ3 , LCS , MF3PL5 , MF3PL6 , MF3PN0L

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Detection Limit

Detection Limit	ICP_MS
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified J.
	MF3PN0L, MF3PP4, MF3PQ1, MF3PQ4, MF3PH3, MF3PN0, MF3PN0D, MF3PQ2, MF3PL6, MF3PM9, MF3PN0A, MF3PQ0, MF3PQ3, MF3PR2, MF3PR3, MF3PL5, PBW, MF3PP3, MF3PP9, MF3PR1, MF3PH4, MF3PN0S, MF3PR5
	Vanadium MF3PN0L, MF3PP4, MF3PQ1, MF3PQ4, MF3PH3
	Arsenic MF3PN0, MF3PN0D, MF3PP4, MF3PQ2, MF3PL6, MF3PM9
	Chromium MF3PN0L, MF3PN0A, MF3PN0, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR2, MF3PR3, MF3PH3, MF3PL5, MF3PL6
	Nickel MF3PN0L, PBW, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9
	Potassium MF3PN0L, PBW
	Copper MF3PR1
	Lead MF3PN0L, PBW, MF3PN0A, MF3PN0, MF3PN0D, MF3PQ2, MF3PQ4, MF3PR1, MF3PR3, MF3PH4, MF3PL5, MF3PL6
	Sodium PBW
	Selenium MF3PN0S, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ3, MF3PH3
	Barium MF3PN0L, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR2, MF3PR3, MF3PH3, MF3PH4, MF3PM9
	Cobalt MF3PN0L, MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR5, MF3PH3, MF3PL5, MF3PL6, MF3PM9
	Zinc PBW
	Aluminum PBW, MF3PN0A, MF3PP4, MF3PP9, MF3PQ0, MF3PQ1, MF3PQ2, MF3PQ3, MF3PQ4, MF3PR1, MF3PR3, MF3PR5, MF3PH3, MF3PH4, MF3PL5, MF3PL6, MF3PM9
	Beryllium PBW, MF3PN0A, MF3PP3
	Antimony PBW, MF3PN0A, MF3PP3, MF3PP4
	Cadmium MF3PP3
	Thallium MF3PN0L, PBW, MF3PN0A, MF3PN0, MF3PN0D, MF3PP3, MF3PP4, MF3PP9
	Magnesium PBW
	Silver MF3PN0A, MF3PP3
	Iron MF3PN0L, MF3PN0A, MF3PN0, MF3PQ1, MF3PQ2, MF3PR2, MF3PR3, MF3PM9
	Manganese MF3PN0L, MF3PN0, MF3PQ0, MF3PQ1, MF3PM9

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Duplicates

Duplicates	ICP_MS
NI04	The following Duplicate or original sample results are less than or equal to 5xCRQL and the absolute difference between duplicate and original samples are greater than CRQL. The original sample results are greater than or equal to MDLs. Detected analytes are qualified J. Nondetected analytes are qualified UJ.
	MF3PN0
	Aluminum MF3PN0

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Holding Times/Preservation

Holding Times/Preservation	ICP_MS
NHT01	The following preserved samples are improperly maintained at temperatures outside the range of 4+/-2 C. Detected analytes with results greater than or equal to MDLs are qualified J-. Use professional judgment to qualify the nondetected analytes.
	MF3PM9, MF3PL6, MF3PP9, MF3PR2, MF3PP3, MF3PN0S, MF3PN0L, MF3PR1, MF3PN0, MF3PQ4, MF3PN0A, MF3PP4, MF3PQ3, MF3PL5, MF3PQ1, MF3PN0D, MF3PR5, MF3PR3, MF3PH4, MF3PQ0, MF3PQ2, MF3PH3

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#### Matrix Spikes

Matrix Spikes	ICP_MS
NG054	The following ICP-MS samples are not qualified due to missing the required Post-digestion spike added in the Spike sample analysis.
	MF3PR2, MF3PL6, MF3PQ4, MF3PP4, MF3PQ1, MF3PQ3, MF3PP9, MF3PN0, MF3PR5, MF3PQ2, MF3PR3, MF3PR1, MF3PP3, MF3PQ0, MF3PH4, MF3PH3, MF3PL5, MF3PM9
	Vanadium MF3PN0A
	Arsenic MF3PN0A
	Chromium MF3PN0A
	Nickel MF3PN0A
	Potassium MF3PN0A
	Copper MF3PN0A
	Lead MF3PN0A
	Selenium MF3PN0A
	Barium MF3PN0A
	Cobalt MF3PN0A
	Zinc MF3PN0A
	Aluminum MF3PN0A
	Beryllium MF3PN0A
	Antimony MF3PN0A
	Thallium MF3PN0A
	Cadmium MF3PN0A
	Magnesium MF3PN0A
	Silver MF3PN0A
	Iron MF3PN0A
	Manganese MF3PN0A

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Serial Dilution

Serial Dilution	ICP_MS
NL032	The following ICP-MS Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. The detected analytes in samples with results greater than or equal to MDLs are qualified J. Nondetected analytes in samples are qualified UJ.
	MF3PQ0, MF3PR3, MF3PQ3, MF3PP3, MF3PH4, MF3PQ4, MF3PP4, MF3PR1, MF3PH3, MF3PN0, MF3PR5, MF3PQ1, MF3PL6, MF3PM9, MF3PL5, MF3PP9, MF3PQ2, MF3PR2
	Barium MF3PN0L
	Zinc MF3PN0L
	Aluminum MF3PN0L